

June 10, 2016

Mr. Jeryl Gardner, P.E., C.E.M.  
Abandoned Mine Lands Program Coordinator,  
NDEP Yerington Project Manager  
Bureau of Corrective Actions  
Nevada Division of Environmental Protection  
901 S Stewart St #4001,  
Carson City, NV 89701

Subject: Enhanced Evaporation Pilot Test Progress Report

Dear Jeryl,

This progress report is submitted in accordance with Paragraph 35(a) of the *Agreement and Administrative Order on Consent for Response Action by Bona Fide Prospective Purchaser, Anaconda Mine, Operable Unit 8*, between the State of Nevada, Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), and Singatse Peak Services LLC (SPS). The date of the Agreement is May 4, 2016. The pilot test is being performed in accordance with the work plan dated March 30, 2016, and which was approved by NDEP on April 11, 2016.

Final Design – Following NDEP approval of the work plan, SPS completed final design of the system. The final design of the system was generally in accordance with the work plan, but included minor modifications as summarized below. The design modifications were based on discussions with ARC, and with other companies that operate enhanced evaporations at other mine sites. This included SPS and Desert Engineering personnel attending a site visit at the Miami Copper Mine in Arizona on April 13, 2016. The design changes include the following:

- Change in the configuration and layout of the four irrigation panels on top of the VLT pad. This was done to minimize the earthwork required to level the evaporation site.
- Addition of an inline filter after the pump and before the sprinkler heads
- Use of the 25 hp Durco pump which required the addition of an auxiliary pump to allow for adequate flow rates and pressures anticipated for the system. Use of the Durco pump does not require any changes to the FMS pumping and contingency procedures used by Atlantic Richfield Company (ARC) for the FMS.
- The sprinkler heads designed by Nelson Irrigation were replaced with stainless steel heads designed by BETE, Inc. The ‘super spray’ heads designed by Senninger Irrigation were retained.
- A different type of moisture sensor was selected and installed as described in the work plan.
- Minor modifications to the piping and electrical system at the VLT pond.
- Elimination of the water truck approach at this time due to lack of availability of equipment. This decision may be reconsidered depending on the performance of the sprinkler system.

Construction – SPS retained Desert Engineering to construct the pilot test. Construction started on May 2, 2016 and was completed on May 25, 2016. The final design of the system is shown on the attached

Figure. This figure shows the panel configuration, the location of pumps, valves, flow meter, pressure gages, moisture sensors and sprinkler heads. A detailed construction documentation report will be included in the Final Report to be prepared following the Notice of Final Completion.

Startup – Startup of the system occurred on May 26 – 27, 2016. The first day was spent reviewing the construction components and attending a Job Safety Analysis (JSA) of the startup and operation of the system. The JSA was attended by SPS and Desert Engineering personnel who will be operating the system. As a result of the JSA, several items were discussed, including the following:

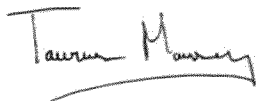
- Pre-start and shut down procedures were prepared, including sequence for startup/shut down of the pumps
- Minor system modifications to eliminate H&S hazards such as tripping and hand safety
- Lock out tag out (LOTO) at the VLT pond for the pumping system
- Appropriate use of Personal Protective Equipment (PPE)
- Review of spill prevention and response activities

The system was pressure tested on the second day and was run for approximately 15 minutes. The pressure test identified two very small pinhole leaks in the existing piping between the VLT pond and the top of the VLT HLP. Both leaks were located on top of the liner system of the VLT HLP and no FMS fluids escaped off the liner. The leaks were repaired prior to normal operation of the system.

Operation – Normal operation of the system started on May 31, 2016. A daily observation form (attached) was prepared for use during operation. This form will be used to document weather conditions, pumping details such as flows and pressures and maintenance or other issues that require maintenance throughout the day. A summary of the operation up to the date of this report is attached to this progress report.

While it is expected to take several weeks of data to understand the system performance, initial observations show that significant evaporation is occurring. As suggested in your letter of April 11, 2016, we will set up a monthly conference call to discuss preliminary results and operational issues that may arise. Please contact me at (775) 463-9600 or via e-mail at [tmassey@quatterra.com](mailto:tmassey@quatterra.com) if you have any questions or comments.

Sincerely,



Taurus Massey,  
SPS Project Coordinator



517 West Bridge Street Suite A  
Yerington NV 89447  
775-463-9600 Office  
775-463-9690 Fax

cc: Tom Patton, SPS  
Gerald Prosalendis, SPS  
Steven Dischler  
Carla Consoli  
Greg Lovato, NDEP  
Jeff Collins, NDEP  
Harold Ball, EPA  
Dante Rodriguez, EPA  
Gene Seidlitz, BLM  
Dave Davis, BLM  
Jack Oman, ARC

**Attachments:**

1. Final Design layout
2. Daily observation form
3. Summary of results through Jun 9

# SPS III

## Singatse Peak Services, LLC

Sprinkler Irrigation Pilot Test Layout  
VLT Heap Leach Pad  
(all operations are on SPS private land)

⊗ Valve

0 100'



## ENHANCED EVAPORATION PILOT TEST – DAILY OBSERVATION FORM



## Summary Table of Evaporation Pilot Test

[illegible]